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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,186	04/11/2005	Hauke Malz	268686USPCT	6307
22850	7590	09/04/2008		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
GOLOBY, JAMES C				
ART UNIT		PAPER NUMBER		
1797				
NOTIFICATION DATE		DELIVERY MODE		
09/04/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

**Application No.**

10/531,186

**Applicant(s)**

MALZ ET AL.

**Examiner**

James Goloboy

**Art Unit**

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/308)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Applicant's arguments submitted 5/7/08 are persuasive and the rejections set forth in the office action mailed 2/7/08 are withdrawn. The phenolic stabilizers of Schmitter do not inherently meet the limitations of the claims because the color value and Hazen number will depend on the method of preparation. New grounds of rejection are set forth below.

***Claim Rejections - 35 USC § 103***

2. Claims 1-7 and 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dexter (U.S. Pat. No. 3,285,855, "Dexter '855") in view of Fritz (U.S. Pat. No. 3,305,520).

Dexter '855, in column 3, structure IId, discloses a phenolic stabilizer with a structure similar to that of the stabilizer of claim 1. In column 4 lines 3-6 Dexter '855 teaches that the lower alkyl groups are preferably tert-butyl groups, in which case the stabilizer of Dexter '855 meets the structural limitations of the stabilizer of claims 1-2. In column 7 lines 3-14 Dexter '855 teaches that the stabilizer can be formed by transesterification, as recited in claim 6, and by treatment of a compound meeting the limitations of claim 7. In column 2 lines 47-58 Dexter '855 discloses that the stabilizers can stabilize various lubricating oils as recited in claims 5 and 13, and also forming mixtures as recited in claim 10. Dexter '855 does not teach that the stabilizer must be crystallized and therefore implicitly teaches that it can be amorphous as recited in claim 1. Dexter '855 does not disclose a mixture further containing a reducing agent, nor does

Dexter '855 disclose the color value of the stabilizer. Dexter '855 does teach in column 8 lines 18-19 that the stabilizers impart little or no color to most substrates.

Fritz, from column 4 line 43 through column 5 line 32, discloses several transesterification reactions. It is noted that the addition of a phosphite to the reaction mixture prior to the transesterification results in a product with a lower color number. The addition of the phosphite of Fritz to the reaction mixture of Dexter '855 prior to transesterification will therefore result in a phenolic stabilizer meeting the color limitations of claims 1-2, and the phosphite will meet the limitations of the reducing agents of claims 1-3 and 11. In example 4 (column 5 lines 27-30), Fritz teaches that the phosphite can be added to the reaction mixture in an amount of 0.05% by weight, falling within the ratio recited in claims 9 and 14 and leading to a ratio of stabilizer to reducing agent meeting the limitations of claims 4 and 12.

It would have been obvious to one of ordinary skill in the art to produce the phenolic stabilizers of Dexter '855 from a reaction mixture including the phosphite of Fritz, as Fritz teaches that it leads to a product with a lower color value, leading to a stabilizer that causes less discoloration for the substrates that it stabilizes.

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dexter '855 in view of Fritz as applied to claims 1-7 and 9-14 above, and further in view of Dexter (U.S. Pat. No. 3,330,859, "Dexter '859").

The discussion of Dexter '855 in view of Fritz above is incorporated here by reference. Dexter '855 and Fritz disclose a process meeting the limitations of claim 6,

where the stabilizer is formed through transesterification, but does not specifically disclose a transesterification using an alcohol meeting the limitations of claim 8.

Dexter '859 discloses phenolic stabilizers similar to those of Dexter '855, and in columns 3-6 (examples 1-15) describes methods of preparing the stabilizers. In examples 6-7, the alcohols used in the transesterifications are neododecanol and dodecanol and neodecanol, which has a molecular weight falling within the range recited in claim 8.

It would have been obvious to one of ordinary skill in the art to use the alcohols of Dexter '859 in preparing the phenolic stabilizers of Dexter '855, as Dexter '859 teaches that they are suitable alcohols for preparing the phenolic stabilizers.

### ***Response to Arguments***

4. Applicant's argument have been considered but are moot in view of the new grounds of rejection. Fritz teaches adding a phosphite reducing agent to a transesterification reaction mixture in order to reduce the color of the product.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Goloboy whose telephone number is (571)272-2476. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JCG

/Glenn A Caldarola/  
Acting SPE of Art Unit 1797